

CLAIMS

14. A nucleic acid sequence selected from SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:5 and SEQ ID NO:7, a fragment thereof, a derivative thereof, and a nucleic acid sequence that hybridizes with a nucleic acid sequence selected from SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:5 and SEQ ID NO:7, the nucleic acid sequence having the biological activity of a nucleic acid sequence selected from SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:5 and SEQ ID NO:7.

15. The nucleic acid sequence of claim 14, wherein the hybridizing nucleic acid sequence hybridizes under stringent conditions with a nucleic acid sequence selected from SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:5 and SEQ ID NO:7.

16. A polypeptide comprising an amino acid sequence selected from SEQ ID NO:3, SEQ ID NO:6 and SEQ ID NO:8.

17. A vector comprising a nucleic acid sequence of claim 14.

18. The vector of claim 17, further comprising one or more regulatory elements that ensure the transcription and/or translation of the nucleic acid sequence of claim 14.

19. A method for the production of plants, comprising the stable integration of at least one nucleic acid sequence of claim 14 into the genome of plant cells or plant tissues and the regeneration of these modified plant cells or plant tissues into plants.

20. The method of claim 19, wherein the integrated nucleic acid sequence further comprises one or more regulatory elements which ensure the transcription and/or translation of the nucleic acid sequence.

21. The method of claim 19, wherein the integrated nucleic acid sequence is expressed in antisense orientation.

22. The method of claim 19, wherein the integrated nucleic acid sequence has the activity of a ribozym which represses the biological activity of the endogenous nucleic acid sequence selected from SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:5 and SEQ ID NO:7.

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23. The method of claim 19, wherein the nucleic acid sequence is integrated via homologous recombination into the genomic region of the homologous endogenous gene.

24. A transformed plant cell or transformed plant tissue, comprising a stable integrated nucleic acid sequence of claim 14 in the genome of the plant cell or plant tissue.

25. The plant cell or plant tissue according to claim 24, regenerable to a seed producing plant.

26. A transgenic plant and its seeds comprising a recombinant nucleic acid sequence according to claim 14.